**Study: Games, Video Improve Preschooler Literacy**

* By [David Nagel](http://thejournal.com/forms/emailtoauthor.aspx?AuthorItem=%7bC71F19DC-CE5A-4810-95BB-24B20F9EBB55%7d&ArticleItem=%7b22A2C212-B1A2-428A-B5E2-FC96EDF3C21B%7d)
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| *Video provided by Education Development Center. QuickTime required.* |

A new study has shown that educational videos and interactive games can have a positive impact on preschooler literacy when incorporated into the curriculum in a classroom setting.

According to the study, released today, children from low-income families whose teachers incorporated digital media (videos, games) in the classroom as part of the Ready to Learn program came out more prepared for kindergarten in terms of literacy skills than those who were not exposed to such a program.

The new study, [Summative Evaluation of the Ready to Learn Initiative](http://cct.edc.org/ready_to_learn.asp), was conducted by [Education Development Center](http://www.edc.org/) and [SRI International](http://www.sri.com/) on behalf of the [Corporation for Public Broadcasting](http://www.cpb.org/) (CPB). It focused on economically disadvantaged children in schools participating in Ready to Learn programs in New York and San Francisco. Ready to Learn is an initiative funded in part by the [United States Department of Education](http://ed.gov) and is operated by CPB, [PBS](http://www.pbs.org/), and the [Ready to Learn Partnership](http://rtlp.org/). It's designed to help improve literacy in students aged 2 to 8 using a variety of media tools and curriculum resources.

For this particular study, about 400 students in 80 preschool classes from 47 different centers participated, with teachers randomly assigned a 10-week curriculum-- --with those using the science curriculum serving as the comparison group. Teachers were given training and support and were asked to engage in "media-rich" activities with their students during the study period (between January 2009 and June 2009). Activities ranged from viewing public broadcasting shows like *Super Why*, *Sesame Street*, and *Between the Lions* to playing Web-based computer games and participating in hands-on activities.

The result was that at the end of the 10-week period, students who participated in the literacy curriculum were more competent at literacy skills than the comparison group, outscoring them in a statistically significant way in four out of five measures: naming letters and knowing letter sounds (based on subtests from the Phonological Awareness Literacy Screening, or PALS), recognizing letters in the student's own name (based on a test developed by the research team and a Washington University researcher), and knowledge of "story and print concepts" (based on a test developed by researchers from the University of Pennsylvania and Mississippi State University). ("Story and print concepts" include reading left to right, identifying the title of the book, identifying the author, orienting the book correctly, and recalling major story points.)

"Many studies have shown that computer technologies can improve learning for students in kindergarten through grade 12, but using digital media in preschool has been controversial," said lead researcher Shelley Pasnik, director of EDC's [Center for Children and Technology](http://cct.edc.org/), in a statement released to coincide with the report. "To make these kinds of gains after preschoolers and their teachers use technology, we think is especially significant."

Specific results included:

* **Letter naming**: An increase from 15.8 letters that could be named on the pre-test to 21.2 on the post-curriculum evaluation for those who participated in the literacy curriculum versus an increase from 13.6 to 16.8 for the comparison curriculum;
* **Letter sounds**: An increase from 5.8 to 10 letter sounds known using the literacy curriculum versus an increase from 5.9 to 6.3 for the comparison curriculum;
* **Story and print concepts**: An increase from a score of 9.7 to 10.8 for children in the literacy curriculum versus an increase from 9.1 to 9.5 for the comparison curriculum; and
* **Knowledge of letters in name**: An increase from 2.4 to 2.7 letters known for students under the literacy curriculum versus an increase from 2.3 to 2.5 for the comparison curriculum.

"We know public media can improve literacy skills when kids watch at home; what we didn't know is that content from multiple shows could be effectively integrated into a curriculum and implemented by teachers," said William Penuel, director of evaluation research for SRI's Center for Technology and Learning, also in a prepared statement. "If media can be harnessed to help close this literacy gap, , it's a powerful new tool for preschool teachers."

The researchers said that this study was the first step in determining the effectiveness of the Ready to Learn approach on preschool students. They indicated that further study is called for, including studying the impact if professional development, as well as comparing the literacy curriculum to other curricula and testing it in other populations.

An executive summary of the research and a complete copy of the report--including methodology and further explanation of various other aspects of the research--can be accessed online from the Education Development Center's site [here](http://cct.edc.org/ready_to_learn.asp).

About the Author

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